searching units with a signal that can be used to determine the bearing to the transmitting stations.

- (c) Locating signals may be transmitted in the following frequency bands: 117.975–136 MHz, 121.5 MHz, 156–174 MHz, 406–406.1 MHz, and 9200–9500 MHz.
- (d) The 9 GHz locating signals must be in accordance with CCIR Recommendation 628 as specified in §80.1101.

## § 80.1131 Transmissions of urgency communications.

- (a) In a terrestrial system the announcement of the urgency message must be made on one or more of the distress and safety calling frequencies specified in §80.1077 using digital selective calling and the urgency call format. A separate announcement need not be made if the urgency message is to be transmitted through the maritime mobile-satellite service.
- (b) The urgency signal and message must be transmitted on one or more of the distress and safety traffic frequencies specified in §80.1077, or via the maritime mobile-satellite service or on other frequencies used for this purpose.
- (c) The urgency signal consists of the words PAN PAN. In radiotelephony each word of the group must be pronounced as the French word "panne".
- (d) The urgency call format and the urgency signal indicate that the calling station has a very urgent message to transmit concerning the safety of a mobile unit or a person.
- (e) In radiotelephony, the urgency message must be preceded by the urgency signal, repeated three times, and the identification of the transmitting station.
- (f) In narrow-band direct-printing, the urgency message must be preceded by the urgency signal and the identification of the transmitting station.
- (g) The urgency call format or urgency signal must be sent only on the authority of the master or the person responsible for the mobile unit carrying the mobile station or mobile earth station.
- (h) The urgency call format or the urgency signal may be transmitted by a land station or a coast earth station with the approval of the responsible authority.

- (i) When an urgency message which calls for action by the stations receiving the message has been transmitted, the station responsible for its transmission must cancel it as soon as it knows that action is no longer necessary.
- (j) Error correction techniques, in accordance with CCIR Recommendation 625 as specified in §80.1101, must be used for urgency messages by direct-printing telegraphy. All messages must be preceded by at least one carriage return, a line feed signal, a letter shift signal and the urgency signal PAN PAN.
- (k) Urgency communications by direct-printing telegraphy should be in the ARQ mode when communicating directly to the Coast Guard or other coast stations on channels which they normally guard. Other distress communications, including those on simplex channels provided for that purpose, should be in the broadcast forward error correction mode. The ARQ mode may subsequently be used when it is advantageous to do so.

## §80.1133 Transmission of safety communications.

- (a) In a terrestrial system the announcement of the safety message must be made on one or more of the distress and safety calling frequencies specified in §80.1077 using digital selective calling techniques. A separate announcement need not be made if the message is to be transmitted through the maritime mobile-satellite service.
- (b) The safety signal and message must normally be transmitted on one or more of the distress and safety traffic frequencies specified in §80.1077, or via the maritime mobile satellite service or on other frequencies used for this purpose.
- (c) The safety signal consists of the word SECURITE. In radiotelephony, it is pronounced as in French.
- (d) The safety call format or the safety signal indicates that the calling station has an important navigational or meteorological warning to transmit.
- (e) In radiotelephony, the safety message must be preceded by the safety signal, repeated three times, and the identification of the transmitting station.

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- (f) In narrow-band direct-printing, the safety message must be preceded by the safety signal and the identification of the transmitting station.
- (g) Error correction techniques, in accordance with CCIR Recommendation 625 as specified in §80.1101, must be used for safety messages by direct-printing telegraphy. All messages must be preceded by at least one carriage return, a line feed signal, a letter shift signal and the safetysignal SECURITE.
- (h) Safety communications by direct-printing telegraphy should be in the ARQ mode when communicating directly to the Coast Guard or other coast stations on channels which they normally guard. Other distress communications, including those on simplex channels provided for that purpose, should be in the broadcast forward error correction mode. The ARQ mode may subsequently be used when it is advantageous to do so.

## §80.1135 Transmission of maritime safety information.

- (a) The operational details of the stations transmitting maritime safety information in accordance with this section are indicated in the ITU List of Radiodetermination and Special Service Stations and the IMO Master Plan of Shore-Based Facilities
- (b) The mode and format of the transmissions mentioned in this section is in accordance with the CCIR Recommendation 540 as specified in §80.1101.
- (c) Maritime safety information is transmitted by means of narrow-band direct-printing telegraphy with forward error correction using the frequency 518 kHz in accordance with the international NAVTEX system (see §80.1077).
- (d) The frequency 490 kHz may be used, after full implementation of the GMDSS, for the transmission of maritime safety information by means of narrow-band direct-printing telegraphy with forward error correction (see §80.1077).
- (e) Internationally, the frequency 4209.5 kHz is used for NAVTEX-type transmissions by means of narrow-band direct-printing telegraphy with forward error correction (see §80.1077).

- (f) Maritime safety information is transmitted by means of narrow-band direct-printing telegraphy with forward error correction using the frequencies 4210 kHz, 6314 kHz, 8416.5 kHz, 12579 kHz, 16806.5 kHz, 19680.5, 22376 kHz, and 26100.5 kHz (see §80.1077).
- (g) Maritime safety information is transmitted via satellite in the maritime mobile-satellite service using the band 1530–1545 MHz (see §80.1077).

# Subpart X—Voluntary Radio Installations

**GENERAL** 

### §80.1151 Voluntary radio operations.

Voluntary ships must meet the rules applicable to the particular mode of operation as contained in the following subparts of this part and as modified by \$80.1153:

Operating Requirements and Procedures— Subpart C

Equipment Technical Requirements—Subpart E

Frequencies—Subpart H

### § 80.1153 Station log and radio watch-

- (a) Licensees of voluntary ships are not required to operate the ship radio station or to maintain radio station logs.
- (b) When a ship radio station of a voluntary ship is being operated, appropriate general purpose watches must be maintained in accordance with §§ 80.146, 80.147 and 80.148.

### VOLUNTARY TELEGRAPHY

### §80.1155 Radioprinter.

Radioprinter operations provide record communications between authorized maritime mobile stations.

- (a) Supplementary eligibility requirements. Ships must be less than 1600 gross tons.
- (b) *Scope of communication.* (1) Ship radioprinter communications may be conducted with an associated private coast station.
- (2) Ships authorized to communicate by radioprinter with a common private coast station may also conduct intership radioprinter operations.